



#5

A-570B.ST25.txt
SEQUENCE LISTING

<110> BOYLE, WILLIAM
HSU, HAILING

<120> RECEPTOR FROM TNF FAMILY

<130> A-570B

<140> 09/779,050
<141> 2001-02-12

<150> 60/181,800
<151> 2000-02-11

<160> 52

<170> PatentIn version 3.0

<210> 1
<211> 1173
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (143)..(997)

PATENT IN

<400> 1	gaattcggca cgagctgagg ggtgagccaa gccctgccat gtagtgcacg caggacatca	60
	acaaaacacag ataacagggaa atgatccatt ccctgtggtc acttattcta aaggccccaa	120
	ccttcaaagt tcaagtagtg at atg gat gac tcc aca gaa agg gag cag tca	172
	Met Asp Asp Ser Thr Glu Arg Glu Gln Ser	
	1 5 10	
	cgc ctt act tct tgc ctt aag aaa aga gaa gaa atg aaa ctg aag gag	220
	Arg Leu Thr Ser Cys Leu Lys Arg Glu Glu Met Lys Leu Lys Glu	
	15 20 25	
	tgt gtt tcc atc ctc cca cgg aag gaa agc ccc tct gtc cga tcc tcc	268
	Cys Val Ser Ile Leu Pro Arg Lys Glu Ser Pro Ser Val Arg Ser Ser	
	30 35 40	
	aaa gac gga aag ctg ctg gct gca acc ttg ctg ctg gca ctg ctg tct	316
	Lys Asp Gly Lys Leu Leu Ala Ala Thr Leu Leu Ala Leu Leu Ser	
	45 50 55	
	tgc tgc ctc acg gtg gtg tct ttc tac cag gtg gcc gcc ctg caa ggg	364
	Cys Cys Leu Thr Val Val Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly	
	60 65 70	
	gac ctg gcc agc ctc cgg gca gag ctg cag ggc cac cac gcg gag aag	412
	Asp Leu Ala Ser Leu Arg Ala Glu Leu Gln Gly His His Ala Glu Lys	
	75 80 85 90	
	ctg cca gca gga gca gga gcc ccc aag gcc ggc ctg gag gaa gct cca	460
	Leu Pro Ala Gly Ala Gly Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro	
	95 100 105	
	gct gtc acc gcg gga ctg aaa atc ttt gaa cca cca gct cca gga gaa	508
	Ala Val Thr Ala Gly Leu Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu	
	110 115 120	
	ggc aac tcc agt cag aac agc aga aat aag cgt gcc gtt cag ggt cca	556
	Gly Asn Ser Ser Gln Asn Ser Arg Asn Lys Arg Ala Val Gln Gly Pro	
	125 130 135	

A-570B.ST25.txt

gaa gaa aca gtc act caa gac tgc ttg caa ctg att gca gac agt gaa	604
Glu Glu Thr Val Thr Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu	
140 145 150	
aca cca act ata caa aaa gga tct tac aca ttt gtt cca tgg ctt ctc	652
Thr Pro Thr Ile Gln Lys Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu	
155 160 165 170	
agc ttt aaa agg gga agt gcc cta gaa gaa aaa gag aat aaa ata ttg	700
Ser Phe Lys Arg Gly Ser Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu	
175 180 185	
gtc aaa gaa act ggt tac ttt ttt ata tat ggt cag gtt tta tat act	748
Val Lys Glu Thr Gly Tyr Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr	
190 195 200	
gat aag acc tac gcc atg gga cat cta att cag agg aag aag gtc cat	796
Asp Lys Thr Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His	
205 210 215	
gtc ttt ggg gat gaa ttg agt ctg gtg act ttg ttt cga tgt att caa	844
Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln	
220 225 230	
<i>Repetet</i>	
aat atg cct gaa aca cta ccc aat aat tcc tgc tat tca gct ggc att	892
Asn Met Pro Glu Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile	
235 240 245 250	
gca aaa ctg gaa gaa gga gat gaa ctc caa ctt gca ata cca aga gaa	940
Ala Lys Leu Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu	
255 260 265	
aat gca caa ata tca ctg gat gga gat gtc aca ttt ttt ggt gca ttg	988
Asn Ala Gln Ile Ser Leu Asp Gly Asp Val Thr Phe Phe Gly Ala Leu	
270 275 280	
aaa ctg ctg tgacctactt acaccatgtc tgtagctatt ttcctccctt	1037
Lys Leu Leu	
285	
tctctgtacc tctaagaaga aagaatctaa ctgaaaatac caaaaaaaaaaaaaaaa	1097
aaaaaaaaagt agttaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa	1157
aaaaactcg aggffff	1173
<210> 2	
<211> 285	
<212> PRT	
<213> Homo sapiens	
<400> 2	
Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu	
1 5 10 15	
Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro	
20 25 30	
Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu	
35 40 45	

Ala Ala Thr Leu Leu Ala Leu Leu Ser Cys Cys Leu Thr Val Val
Page 2

A-570B.ST25.txt

Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
 65 70 75 80

Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly
 85 90 95

Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu
 100 105 110

Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn
 115 120 125

Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln
 130 135 140

Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys
 145 150 155 160

Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser
 165 170 175

Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr
 180 185 190

Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met
 195 200 205

Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu
 210 215 220

Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu
 225 230 235 240

Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly
 245 250 255

Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu
 260 265 270

Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
 275 280 285

<210> 3
<211> 1139
<212> DNA
<213> *Mus musculus*

<220>
<221> CDS
<222> (52) .. (978)

A-570B.ST25.txt

A-570B.ST25.txt

aat atg ccc aaa aca ctg ccc aac aat tcc tgc tac ttg gct ggc atc Asn Met Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Leu Ala Gly Ile 260 265 270	873
---	-----

gcg agg ctg gaa gaa gga gat gag att cag ctt gca att cct cgg gag Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro Arg Glu 275 280 285 290	921
---	-----

aat gca cag att tca cgc aac gga gac gac acc ttc ttt ggt gcc cta Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly Ala Leu 295 300 305	969
---	-----

aaa ctg ctg taactcactt gctggagtgc gtgatcccct tccctcgctc Lys Leu Leu	1018
--	------

tctctgtacc tccgagggag aaacagacga ctggaaaaat aaaagatggg gaaagccgtc	1078
---	------

agcggaaagt ttctcgatcg ccgttgaatc tgatccaaac cagggaaatat aacagacagc	1138
--	------

c	1139
---	------

<210> 4
<211> 309
<212> PRT
<213> Mus musculus

<400> 4

Met Asp Glu Ser Ala Lys Thr Leu Pro Pro Pro Cys Leu Cys Phe Cys 1 5 10 15
--

Ser Glu Lys Gly Glu Asp Met Lys Val Gly Tyr Asp Pro Ile Thr Pro 20 25 30

Gln Lys Glu Glu Gly Ala Trp Phe Gly Ile Cys Arg Asp Gly Arg Leu 35 40 45

Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Ser Ser Phe Thr Ala 50 55 60

Met Ser Leu Tyr Gln Leu Ala Ala Leu Gln Ala Asp Leu Met Asn Leu 65 70 75 80
--

Arg Met Glu Leu Gln Ser Tyr Arg Gly Ser Ala Thr Pro Ala Ala 85 90 95

Gly Ala Pro Glu Leu Thr Ala Gly Val Lys Leu Leu Thr Pro Ala Ala 100 105 110
--

Pro Arg Pro His Asn Ser Ser Arg Gly His Arg Asn Arg Arg Ala Phe 115 120 125
--

Gln Gly Pro Glu Glu Thr Glu Gln Asp Val Asp Leu Ser Ala Pro Pro 130 135 140
--

Ala Pro Cys Leu Pro Gly Cys Arg His Ser Gln His Asp Asp Asn Gly Page 5

A-570B.ST25.txt

145		150		155		160									
Met	Asn	Leu	Arg	Asn	Ile	Ile	Gln	Asp	Cys	Leu	Gln	Leu	Ile	Ala	Asp
				165					170					175	
Ser	Asp	Thr	Pro	Thr	Ile	Arg	Lys	Gly	Thr	Tyr	Thr	Phe	Val	Pro	Trp
			180				185						190		
Leu	Leu	Ser	Phe	Lys	Arg	Gly	Asn	Ala	Leu	Glu	Glu	Lys	Glu	Asn	Lys
				195			200					205			
Ile	Val	Val	Arg	Gln	Thr	Gly	Tyr	Phe	Phe	Ile	Tyr	Ser	Gln	Val	Leu
				210		215				220					
Tyr	Thr	Asp	Pro	Ile	Phe	Ala	Met	Gly	His	Val	Ile	Gln	Arg	Lys	Lys
				225		230			235			240			
Val	His	Val	Phe	Gly	Asp	Glu	Leu	Ser	Leu	Val	Thr	Leu	Phe	Arg	Cys
				245			250				255				
Ile	Gln	Asn	Met	Pro	Lys	Thr	Leu	Pro	Asn	Asn	Ser	Cys	Tyr	Leu	Ala
				260			265				270				
Gly	Ile	Ala	Arg	Leu	Glu	Glu	Gly	Asp	Glu	Ile	Gln	Leu	Ala	Ile	Pro
				275		280				285					
Arg	Glu	Asn	Ala	Gln	Ile	Ser	Arg	Asn	Gly	Asp	Asp	Thr	Phe	Phe	Gly
				290		295			300						
Ala	Leu	Lys	Leu	Leu											
				305											

<210> 5
<211> 278
<212> PRT
<213> Homo sapiens

<220>
<221> MUTAGEN
<222> (3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 17, 18, 20, 22, 25, 26, 27, 28, 29,
30, 31, 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 47, 50, 51, 52, 54, 55,
57, 60, 78, 79, 86, 87, 88, 89, 90, 91, 92, 95, 100, 101, 105, 107, 108, 109, 111,
114, 115, 116, 120, 121, 122, 125, 128, 135, 136, 147, 152, 155, 179, 181, 182,
190, 197, 198, 199, 204, 231, 245, 252, 265, 266,)..(269)
<223> Xaa is absent or any amino acid residue

<400> 5

Met	Asp	Xaa	Ser	Xaa	Cys								
1				5				10					15
Xaa	Xaa	Lys	Xaa	Glu	Xaa	Met	Lys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
				20				25				30	
Xaa	Xaa	Xaa	Glu	Xaa									
				35				40				45	

A-570B.ST25.txt

Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Xaa Xaa Xaa Thr Xaa
50 55 60

Xaa Ser Xaa Tyr Gln Xaa Ala Ala Leu Gln Xaa Asp Leu Xaa Xaa Leu
65 70 75 80

Arg Xaa Glu Leu Gln Xaa Xaa Xaa Xaa Xaa Xaa Pro Ala Xaa Ala
85 90 95

Gly Ala Pro Xaa Xaa Thr Ala Gly Xaa Lys Xaa Xaa Xaa Pro Xaa Ala
100 105 110

Pro Xaa Xaa Xaa Asn Ser Ser Xaa Xaa Xaa Arg Asn Xaa Arg Ala Xaa
115 120 125

Gln Gly Pro Glu Glu Thr Xaa Xaa Gln Asp Cys Leu Gln Leu Ile Ala
130 135 140

Asp Ser Xaa Thr Pro Thr Ile Xaa Lys Gly Xaa Tyr Thr Phe Val Pro
145 150 155 160

Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala Leu Glu Glu Lys Glu Asn
165 170 175

Lys Ile Xaa Val Xaa Xaa Thr Gly Tyr Phe Phe Ile Tyr Xaa Gln Val
180 185 190

Leu Tyr Thr Asp Xaa Xaa Xaa Ala Met Gly His Xaa Ile Gln Arg Lys
195 200 205

Lys Val His Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg
210 215 220

Cys Ile Gln Asn Met Pro Xaa Thr Leu Pro Asn Asn Ser Cys Tyr Ser
225 230 235 240

Ala Gly Ile Ala Xaa Leu Glu Glu Gly Asp Glu Xaa Gln Leu Ala Ile
245 250 255

Pro Arg Glu Asn Ala Gln Ile Ser Xaa Xaa Gly Asp Xaa Thr Phe Phe
260 265 270

Gly Ala Leu Lys Leu Leu
275

<210> 6
<211> 102
<212> PRT
<213> Consensus

<220>
<221> MUTAGEN
<222> (1, 8, 10, 12, 15, 18, 21, 23, 25, 29, 39, 41, 44, 47, 49, 51, 53, 55, 57,
60, 64, 66, 68, 70, 72, 79, 81, 84, 90, 92)..(94)
<223> Xaa is absent or any amino acid residue

<400> 6

Xaa Pro Ala Ala His Leu Thr Xaa Pro Xaa Leu Xaa Trp Ala Xaa Leu
1 5 10 15

Ser Xaa Gly Val Xaa Leu Xaa Asn Xaa Leu Val Val Xaa Gly Leu Tyr
20 25 30

Phe Ile Tyr Ser Gln Val Xaa Phe Xaa Gly Gln Xaa Cys Pro Xaa Val
35 40 45

A-570B.ST25.txt

Xaa Leu Xaa His Xaa Val Xaa Val Xaa Tyr Pro Xaa Leu Leu Ser Xaa
50 55 60

Thr Xaa Cys Xaa Trp Xaa Ser Xaa Tyr Leu Gly Gly Val Phe Xaa Leu
65 70 75 80

Xaa Gly Asp Xaa Leu Tyr Val Asn Val Xaa Ser Xaa Phe Xaa Thr Phe
85 90 95

Phe Gly Leu Phe Lys Leu
100

<210> 7
<211> 143
<212> PRT
<213> Homo sapiens

<400> 7

Glu Lys Lys Glu Leu Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn
1 5 10 15

Ser Arg Ser Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu
20 25 30

Leu Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Leu Asn Glu Thr
35 40 45

Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys
50 55 60

Asn Asn Leu Pro Leu Ser His Lys Val Tyr Met Arg Asn Ser Lys Tyr
65 70 75 80

Pro Gln Asp Leu Val Met Met Glu Gly Lys Met Met Ser Tyr Cys Thr
85 90 95

Thr Gly Gln Met Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn
100 105 110

Leu Thr Ser Ala Asp His Leu Tyr Val Asn Val Ser Glu Leu Ser Leu
115 120 125

Val Asn Phe Glu Glu Ser Gln Thr Phe Phe Gly Leu Tyr Lys Leu
130 135 140

<210> 8
<211> 143
<212> PRT
<213> Mus musculus

<400> 8

Glu Lys Lys Glu Pro Arg Ser Val Ala His Leu Thr Gly Asn Pro His
1 5 10 15

Ser Arg Ser Ile Pro Leu Glu Trp Glu Asp Thr Tyr Gly Thr Ala Leu
20 25 30

Ile Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn Glu Thr
35 40 45

Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys
50 55 60

Asn Asn Gln Pro Ile Asn His Lys Val Tyr Met Arg Asn Ser Lys Tyr
65 70 75 80

A-570B.ST25.txt

Pro Glu Asp Leu Val Leu Met Glu Glu Lys Arg Leu Asn Tyr Cys Thr
85 90 95

Thr Gly Gln Ile Trp Ala His Ser Ser Tyr Leu Gly Ala Val Phe Asn
100 105 110

Leu Thr Ser Ala Asp His Leu Val Tyr Asn Ile Ser Gln Leu Ser Leu
115 120 125

Ile Asn Phe Glu Glu Ser Lys Thr Phe Phe Gly Leu Tyr Lys Leu
130 135 140

<210> 9
<211> 143
<212> PRT
<213> Rattus rattus

<400> 9

Glu Thr Lys Lys Pro Arg Ser Val Ala His Leu Thr Gly Asn Pro Arg
1 5 10 15

Ser Arg Ser Ile Pro Leu Glu Trp Glu Asp Thr Tyr Gly Thr Ala Leu
20 25 30

Ile Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn Glu Ala
35 40 45

Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys
50 55 60

Asn Ser Gln Pro Leu Ser His Lys Val Tyr Met Arg Asn Phe Lys Tyr
65 70 75 80

Pro Gly Asp Leu Val Leu Met Glu Glu Lys Lys Leu Asn Tyr Cys Thr
85 90 95

Thr Gly Gln Ile Trp Ala His Ser Ser Tyr Leu Gly Ala Val Phe Asn
100 105 110

Leu Thr Val Ala Asp His Leu Tyr Val Asn Ile Ser Gln Leu Ser Leu
115 120 125

Ile Asn Phe Glu Glu Ser Lys Thr Phe Phe Gly Leu Tyr Lys Leu
130 135 140

<210> 10
<211> 146
<212> PRT
<213> Homo sapiens

<400> 10

Gly Asp Gln Asn Pro Gln Ile Ala Ala Arg Val Ile Ser Glu Ala Ser
1 5 10 15

Ser Lys Thr Thr Ser Val Leu Gln Trp Ala Glu Lys Gly Tyr Tyr Thr
20 25 30

Met Ser Asn Asn Leu Val Thr Leu Glu Asn Gly Lys Gln Leu Thr Val
35 40 45

Lys Arg Gln Gly Leu Tyr Tyr Ile Tyr Ala Gln Val Thr Phe Cys Ser
50 55 60

Asn Arg Glu Ala Ser Ser Gln Ala Pro Phe Ile Ala Ser Leu Cys Leu
65 70 75 80

A-570B.ST25.txt

Lys Ser Pro Gly Arg Phe Glu Arg Ile Leu Leu Arg Ala Ala Asn Thr
85 90 95

His Ser Ser Ala Lys Pro Cys Gly Gln Gln Ser Ile His Leu Gly Gly
100 105 110

Val Phe Glu Leu Gln Pro Gly Ala Ser Val Phe Val Asn Val Thr Asp
115 120 125

Pro Ser Gln Val Ser His Gly Thr Gly Phe Thr Ser Phe Gly Leu Leu
130 135 140

Lys Leu
145

<210> 11
<211> 146
<212> PRT
<213> Mus musculus

<400> 11

Gly Asp Glu Asp Pro Gln Ile Ala Ala His Val Val Ser Glu Ala Asn
1 5 10 15

Ser Asn Ala Ala Ser Val Leu Gln Trp Ala Lys Lys Gly Tyr Tyr Thr
20 25 30

Met Lys Ser Asn Leu Val Met Leu Glu Asn Gly Lys Gln Leu Thr Val
35 40 45

Lys Arg Glu Gly Leu Tyr Tyr Val Tyr Thr Gln Val Thr Phe Gln Ser
50 55 60

Asn Arg Glu Pro Ser Ser Gln Arg Pro Phe Ile Val Gly Leu Trp Leu
65 70 75 80

Lys Pro Ser Ile Gly Ser Glu Arg Ile Leu Leu Lys Ala Ala Asn Thr
85 90 95

His Ser Ser Ser Gln Leu Cys Glu Gln Gln Ser Val His Leu Gly Gly
100 105 110

Val Phe Glu Leu Gln Ala Gly Ala Ser Val Phe Val Asn Val Thr Glu
115 120 125

Ala Ser Gln Val Ile His Arg Val Gly Phe Ser Ser Phe Gly Leu Leu
130 135 140

Lys Leu
145

<210> 12
<211> 144
<212> PRT
<213> Homo sapiens

<400> 12

Val Thr Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr
1 5 10 15

Ile Gln Lys Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys
20 25 30

Arg Gly Ser Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu
35 40 45

A-570B.ST25.txt

Thr Gly Tyr Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr
50 55 60

Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly
65 70 75 80

Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro
85 90 95

Glu Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu
100 105 110

Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln
115 120 125

Ile Ser Leu Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
130 135 140

<210> 13
<211> 147
<212> PRT
<213> Mus musculus

<400> 13

Leu Arg Asn Ile Ile Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Asp
1 5 10 15

Thr Pro Thr Ile Arg Lys Gly Thr Tyr Thr Phe Val Pro Trp Leu Leu
20 25 30

Ser Phe Lys Arg Gly Asn Ala Leu Glu Glu Lys Glu Asn Lys Ile Val
35 40 45

Val Arg Gln Thr Gly Tyr Phe Phe Ile Tyr Ser Gln Val Leu Tyr Thr
50 55 60

Asp Pro Ile Phe Ala Met Gly His Val Ile Gln Arg Lys Lys Val His
65 70 75 80

Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln
85 90 95

Asn Met Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile
100 105 110

Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro Arg Glu
115 120 125

Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly Ala Leu
130 135 140

Lys Leu Leu
145

<210> 14
<211> 160
<212> PRT
<213> Mus musculus

<400> 14

Gly Lys Pro Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Ala
1 5 10 15

Ser Ile Pro Ser Gly Ser His Lys Val Thr Leu Ser Ser Trp Tyr His
20 25 30

A-570B.ST25.txt

Asp Arg Gly Trp Ala Lys Ile Ser Asn Met Thr Leu Ser Asn Gly Lys
35 40 45

Leu Arg Val Asn Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys
50 55 60

Phe Arg His His Glu Thr Ser Gly Ser Val Pro Thr Asp Tyr Leu Gln
65 70 75 80

Leu Met Val Tyr Val Val Lys Thr Ser Ile Lys Ile Pro Ser Ser His
85 90 95

Asn Leu Met Lys Gly Gly Ser Thr Lys Asn Trp Ser Gly Asn Ser Glu
100 105 110

Phe His Phe Tyr Ser Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ala
115 120 125

Gly Glu Glu Ile Ser Ile Gln Val Ser Asn Pro Ser Leu Leu Asp Pro
130 135 140

Asp Gln Asp Ala Thr Tyr Phe Gly Ala Phe Lys Val Gln Asp Ile Asp
145 150 155 160

<210> 15

<211> 160

<212> PRT

<213> Homo sapiens

<400> 15

Ser Lys Leu Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Thr
1 5 10 15

Asp Ile Pro Ser Gly Ser His Lys Val Ser Leu Ser Ser Trp Tyr His
20 25 30

Asp Arg Gly Trp Ala Lys Ile Ser Asn Met Thr Phe Ser Asn Gly Lys
35 40 45

Leu Ile Val Asn Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys
50 55 60

Phe Arg His His Glu Thr Ser Gly Asp Leu Ala Thr Glu Tyr Leu Gln
65 70 75 80

Leu Met Val Tyr Val Thr Lys Thr Ser Ile Lys Ile Pro Ser Ser His
85 90 95

Thr Leu Met Lys Gly Gly Ser Thr Lys Tyr Trp Ser Gly Asn Ser Glu
100 105 110

Phe His Phe Tyr Ser Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ser
115 120 125

Gly Glu Glu Ile Ser Ile Glu Val Ser Asn Pro Ser Leu Leu Asp Pro
130 135 140

Asp Gln Asp Ala Thr Tyr Phe Gly Ala Phe Lys Val Arg Asp Ile Asp
145 150 155 160

<210> 16

<211> 166

<212> PRT

<213> Homo sapiens

<400> 16

A-570B.ST25.txt

Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly Thr Arg Gly
1 5 10 15

Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu Lys Ala Leu
20 25 30

Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly His Ser Phe
35 40 45

Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile His Glu Lys
50 55 60

Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln Glu Glu
65 70 75 80

Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln Tyr Ile Tyr
85 90 95

Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys Ser Ala Arg
100 105 110

Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr Ser Ile Tyr
115 120 125

Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile Phe Val Ser
130 135 140

Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala Ser Phe Phe
145 150 155 160

Gly Ala Phe Leu Val Gly
165

<210> 17
<211> 172
<212> PRT
<213> Mus musculus

<400> 17

Gly Gly Arg Pro Gln Lys Val Ala Ala His Ile Thr Gly Ile Thr Arg
1 5 10 15

Arg Ser Asn Ser Ala Leu Ile Pro Ile Ser Lys Asp Gly Lys Thr Leu
20 25 30

Gly Gln Lys Ile Glu Ser Trp Glu Ser Ser Arg Lys Gly His Ser Phe
35 40 45

Leu Asn His Val Leu Phe Arg Asn Gly Glu Leu Val Ile Glu Gln Glu
50 55 60

Gly Leu Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln Glu Ala
65 70 75 80

Glu Asp Ala Ser Lys Met Val Ser Lys Asp Lys Val Arg Thr Lys Gln
85 90 95

Leu Val Gln Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Val
100 105 110

Leu Met Lys Ser Ala Arg Asn Ser Cys Trp Ser Arg Asp Ala Glu Tyr
115 120 125

Gly Leu Tyr Ser Ile Tyr Gln Gly Gly Leu Phe Glu Leu Lys Lys Asn
130 135 140

A-570B.ST25.txt

Asp Arg Ile Phe Val Ser Val Thr Asn Glu His Leu Met Asp Leu Asp
 145 150 155 160

Gln Glu Ala Ser Phe Phe Gly Ala Phe Leu Ile Asn
 165 170

<210> 18
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 18

Arg Ala Pro Phe Lys Lys Ser Trp Ala Tyr Leu Gln Val Ala Lys His
 1 5 10 15

Leu Asn Lys Thr Lys Leu Ser Trp Asn Lys Asp Gly Ile Leu His Gly
 20 25 30

Val Arg Tyr Gln Asp Gly Asn Leu Val Ile Gln Phe Pro Gly Leu Tyr
 35 40 45

Phe Ile Ile Cys Gln Leu Gln Phe Leu Val Gln Cys Pro Asn Asn Ser
 50 55 60

Val Asp Leu Lys Leu Glu Leu Leu Ile Asn Lys His Ile Lys Lys Gln
 65 70 75 80

Ala Leu Val Thr Val Cys Glu Ser Gly Met Gln Thr Lys His Val Tyr
 85 90 95

Gln Asn Leu Ser Gln Phe Leu Leu Asp Tyr Leu Gln Val Asn Thr Thr
 100 105 110

Ile Ser Val Asn Val Asp Thr Phe Gln Tyr Ile Asp Thr Ser Thr Phe
 115 120 125

Pro Leu Glu Asn Val Leu Ser Ile Phe Leu Tyr Ser Asn Ser Asp
 130 135 140

<210> 19
 <211> 143
 <212> PRT
 <213> Mus musculus

<400> 19

Ser Thr Pro Ser Lys Lys Ser Trp Ala Tyr Leu Gln Val Ser Lys His
 1 5 10 15

Leu Asn Asn Thr Lys Leu Ser Trp Asn Glu Asp Gly Thr Ile His Gly
 20 25 30

Leu Ile Tyr Gln Asp Gly Asn Leu Ile Val Gln Phe Pro Gly Leu Tyr
 35 40 45

Phe Ile Val Cys Gln Leu Gln Phe Leu Val Gln Cys Ser Asn His Ser
 50 55 60

Val Asp Leu Thr Leu Gln Leu Leu Ile Asn Ser Lys Ile Lys Lys Gln
 65 70 75 80

Thr Leu Val Thr Val Cys Glu Ser Gly Val Gln Ser Lys Asn Ile Tyr
 85 90 95

Gln Asn Leu Ser Gln Phe Leu Leu His Tyr Leu Gln Val Asn Ser Thr
 100 105 110

A-570B.ST25.txt

Ile Ser Val Arg Val Asp Asn Phe Gln Tyr Val Asp Thr Asn Thr Phe
115 120 125

Pro Leu Asp Asn Val Leu Ser Val Phe Leu Tyr Ser Ser Ser Asp
130 135 140

<210> 20
<211> 163
<212> PRT
<213> Homo sapiens

<400> 20

Asp Leu Ser Pro Gly Leu Pro Ala Ala His Leu Ile Gly Ala Pro Leu
1 5 10 15

Lys Gly Gln Gly Leu Gly Trp Glu Thr Thr Lys Glu Gln Ala Phe Leu
20 25 30

Thr Ser Gly Thr Gln Phe Ser Asp Ala Glu Gly Leu Ala Leu Pro Gln
35 40 45

Asp Gly Leu Tyr Tyr Leu Tyr Cys Leu Val Gly Tyr Arg Gly Arg Ala
50 55 60

Pro Pro Gly Gly Asp Pro Gln Gly Arg Ser Val Thr Leu Arg Ser
65 70 75 80

Ser Leu Tyr Arg Ala Gly Gly Ala Tyr Gly Pro Gly Thr Pro Glu Leu
85 90 95

Leu Leu Glu Gly Ala Glu Thr Val Thr Pro Val Leu Asp Pro Ala Arg
100 105 110

Arg Gln Gly Tyr Gly Pro Leu Trp Tyr Thr Ser Val Gly Phe Gly Gly
115 120 125

Leu Val Gln Leu Arg Arg Gly Glu Arg Val Tyr Val Asn Ile Ser His
130 135 140

Pro Asp Met Val Asp Phe Ala Arg Gly Lys Thr Phe Phe Gly Ala Val
145 150 155 160

Met Val Gly

<210> 21
<211> 159
<212> PRT
<213> Mus musculus

<400> 21

Asp Leu Asn Pro Glu Leu Pro Ala Ala His Leu Ile Gly Ala Trp Met
1 5 10 15

Ser Gly Gln Gly Leu Ser Trp Glu Ala Ser Gln Glu Glu Ala Phe Leu
20 25 30

Arg Ser Gly Ala Gln Phe Ser Pro Thr His Gly Leu Ala Leu Pro Gln
35 40 45

Asp Gly Val Tyr Tyr Leu Tyr Cys His Val Gly Tyr Arg Gly Arg Thr
50 55 60

Pro Pro Ala Gly Arg Ser Arg Ala Arg Ser Leu Thr Leu Arg Ser Ala
65 70 75 80

A-570B.ST25.txt

Leu Tyr Arg Ala Gly Gly Ala Tyr Gly Arg Gly Ser Pro Glu Leu Leu
85 90 95

Leu Glu Gly Ala Glu Thr Val Thr Pro Val Val Asp Pro Ile Gly Tyr
100 105 110

Gly Ser Leu Trp Tyr Thr Ser Val Gly Phe Gly Gly Leu Ala Gln Leu
115 120 125

Arg Ser Gly Glu Arg Val Tyr Val Asn Ile Ser His Pro Asp Met Val
130 135 140

Asp Tyr Arg Arg Gly Lys Thr Phe Phe Gly Ala Val Met Val Gly
145 150 155

<210> 22

<211> 149

<212> PRT

<213> Homo sapiens

<400> 22

Ala His Ser Thr Leu Lys Pro Ala Ala His Leu Ile Gly Asp Pro Ser
1 5 10 15

Lys Gln Asn Ser Leu Leu Trp Arg Ala Asn Thr Asp Arg Ala Phe Leu
20 25 30

Gln Asp Gly Phe Ser Leu Ser Asn Asn Ser Leu Leu Val Pro Thr Ser
35 40 45

Gly Ile Tyr Phe Val Tyr Ser Gln Val Val Phe Ser Gly Lys Ala Tyr
50 55 60

Ser Pro Lys Ala Thr Ser Ser Pro Leu Tyr Leu Ala His Glu Val Gln
65 70 75 80

Leu Phe Ser Ser Gln Tyr Pro Phe His Val Pro Leu Leu Ser Ser Gln
85 90 95

Lys Met Val Tyr Pro Gly Leu Gln Glu Pro Trp Leu His Ser Met Tyr
100 105 110

His Gly Ala Ala Phe Gln Leu Thr Gln Gly Asp Gln Leu Ser Thr His
115 120 125

Thr Asp Gly Ile Pro His Leu Val Leu Ser Pro Ser Thr Val Phe Phe
130 135 140

Gly Ala Phe Ala Leu
145

<210> 23

<211> 149

<212> PRT

<213> Mus musculus

<400> 23

Thr His Gly Ile Leu Lys Pro Ala Ala His Leu Val Gly Tyr Pro Ser
1 5 10 15

Lys Gln Asn Ser Leu Leu Trp Arg Ala Ser Thr Asp Arg Ala Phe Leu
20 25 30

Arg His Gly Phe Ser Leu Ser Asn Asn Ser Leu Leu Ile Pro Thr Ser
35 40 45

A-570B.ST25.txt

Gly Leu Tyr Phe Val Tyr Ser Gln Val Val Phe Ser Gly Glu Ser Cys
50 55 60

Ser Pro Arg Ala Ile Pro Thr Pro Ile Tyr Leu Ala His Glu Val Gln
65 70 75 80

Leu Phe Ser Ser Gln Tyr Pro Phe His Val Pro Leu Leu Ser Ala Gln
85 90 95

Lys Ser Val Tyr Pro Gly Leu Gln Gly Pro Trp Val Arg Ser Met Tyr
100 105 110

Gln Gly Ala Val Phe Leu Leu Ser Lys Gly Asp Gln Leu Ser Thr His
115 120 125

Thr Asp Gly Ile Ser His Leu His Phe Ser Pro Ser Ser Val Phe Phe
130 135 140

Gly Ala Phe Ala Leu
145

<210> 24
<211> 152
<212> PRT
<213> Homo sapiens

<400> 24

Arg Thr Pro Ser Asp Lys Pro Val Ala His Val Val Ala Asn Pro Gln
1 5 10 15

Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu Leu
20 25 30

Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu Val Val Pro Ser Glu
35 40 45

Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys
50 55 60

Pro Ser Thr His Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val
65 70 75 80

Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala Ile Lys Ser Pro Cys
85 90 95

Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu Pro
100 105 110

Ile Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser
115 120 125

Ala Glu Ile Asn Arg Pro Asp Tyr Leu Asp Phe Ala Glu Ser Gly Gln
130 135 140

Val Tyr Phe Gly Ile Ile Ala Leu
145 150

<210> 25
<211> 29
<212> PRT
<213> Artificial

<220>
<223> AGP-3 RELATED PROTEIN

<220>
<221> MUTAGEN

A-570B.ST25.txt

<222> (11, 16)..(19)
<223> Xaa is absent or any amino acid residue

<400> 25

Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Xaa Thr Pro Thr Ile Xaa
1 5 10 15

Lys Gly Xaa Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe
20 25

<210> 26
<211> 25
<212> PRT
<213> Artificial

<220>
<223> CONSENSUS

<220>
<221> MUTAGEN
<222> (5)..(5)
<223> Xaa is absent or any amino acid residue

<400> 26

Ala Met Gly His Xaa Ile Gln Arg Lys Lys Val His Val Phe Gly Asp
1 5 10 15

Glu Leu Ser Leu Val Thr Leu Phe Arg
20 25

<210> 27
<211> 142
<212> PRT
<213> Artificial

<220>
<223> CONSENSUS

<220>
<221> MUTAGEN
<222> (43, 45, 46, 54, 61-63, 68, 95, 109, 116, 129, 130)..(133)
<223> Xaa is absent or any amino acid residue

<400> 27

Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Xaa Thr Pro Thr Ile Xaa
1 5 10 15

Lys Gly Xaa Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly
20 25 30

Xaa Ala Leu Glu Glu Lys Glu Asn Lys Ile Xaa Val Xaa Xaa Thr Gly
35 40 45

Tyr Phe Phe Ile Tyr Xaa Gln Val Leu Tyr Thr Asp Xaa Xaa Xaa Ala
50 55 60

Met Gly His Xaa Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu
65 70 75 80

Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Xaa Thr
85 90 95

A-570B.ST25.txt
Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Xaa Leu Glu Glu
100 105 110

Gly Asp Glu Xaa Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser
115 120 125

Xaa Xaa Gly Asp Xaa Thr Phe Phe Gly Ala Leu Lys Leu Leu
130 135 140

<210> 28
<211> 20
<212> DNA
<213> Mus musculus

<400> 28
aattaaccct cactaaaggg

20

<210> 29
<211> 33
<212> DNA
<213> Mus musculus

<400> 29
tctccctcga gatcacgcac tccagcaagt gag

33

<210> 30
<211> 24
<212> DNA
<213> Mus musculus

<400> 30
aacaggctat ttcttcatct acag

24

<210> 31
<211> 25
<212> DNA
<213> Mus musculus

<400> 31
ctcatcaatg tatcttatca tgtct

25

<210> 32
<211> 25
<212> DNA
<213> Mus musculus

<400> 32
ctcatcaatg tatcttatca tgtct

25

<210> 33
<211> 20
<212> DNA
<213> Mus musculus

<400> 33
agccgcggcc acaggaacag

20

<210> 34
<211> 19
<212> DNA
<213> Mus musculus

A-570B.ST25.txt

<400> 34
tggatgacat gaccctatag

19

<210> 35
<211> 7
<212> PRT
<213> Homo sapiens

<400> 35

Met Asn Ser Arg Asn Lys Arg
1 5

<210> 36
<211> 60
<212> DNA
<213> Homo sapiens

<400> 36

atttgattct agaaggagga ataacatatg aacagccgtataaagcgtgc cgttcagggt

60

<210> 37
<211> 45
<212> DNA
<213> Homo sapiens

<400> 37

ccgcggatcc tcgagttaca gcagttcaa tgcaccaaaa aatgt

45

<210> 38
<211> 17
<212> PRT
<213> Homo sapiens

<400> 38

Met Asp Tyr Lys Asp Asp Asp Asp Lys Lys Leu Asn Ser Arg Asn Lys
1 5 10 15

Arg

<210> 39
<211> 48
<212> DNA
<213> Homo sapiens

<400> 39

gacgatgaca agaagcttaa cagccgtaat aagcgtgccg ttcaagggt

48

<210> 40
<211> 151
<212> PRT
<213> Mus musculus

<400> 40

Gln Asn Ser Ser Asp Lys Pro Val Ala His Val Val Ala Asn His Gln
1 5 10 15

Val Glu Glu Gln Leu Glu Trp Leu Ser Gln Arg Ala Asn Ala Leu Leu
20 25 30

Ala Asn Gly Met Asp Leu Lys Asp Asn Gln Leu Val Val Pro Ala Asp

A-570B.ST25.txt

35		40		45											
Gly	Leu	Tyr	Leu	Val	Tyr	Ser	Gln	Val	Leu	Phe	Lys	Gly	Gln	Gly	Cys
50						55					60				
Pro	Asp	Tyr	Val	Leu	Leu	Thr	His	Thr	Val	Ser	Arg	Phe	Ala	Ile	Ser
65						70				75					80
Tyr	Gln	Glu	Lys	Val	Asn	Leu	Leu	Ser	Ala	Val	Lys	Ser	Pro	Cys	Pro
						85				90					95
Lys	Asp	Thr	Pro	Glu	Gly	Ala	Glu	Leu	Lys	Pro	Trp	Tyr	Glu	Pro	Ile
						100				105					110
Tyr	Leu	Gly	Gly	Val	Phe	Gln	Leu	Glu	Lys	Gly	Asp	Gln	Leu	Ser	Ala
						115				120					125
Glu	Val	Asn	Leu	Pro	Lys	Tyr	Leu	Asp	Phe	Ala	Glu	Ser	Gly	Gln	Val
						130				135					140

Tyr Phe Gly Val Ile Ala Leu
145 150

<210> 41
<211> 1340
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (28)..(906)

<400> 41

gtcgacccac	gcgtccgatc	ctgagta	atg	agt	ggc	ctg	ggc	cgg	agc	agg	cga				54
			Met	Ser	Gly	Leu	Gly	Arg	Ser	Arg	Arg				
			1						5						

ggt	ggc	cgg	agc	cgt	gtg	gac	cag	gag	gag	cgc	ttt	cca	cag	ggc	ctg	102
Gly	Gly	Arg	Ser	Arg	Val	Asp	Gln	Glu	Glu	Arg	Phe	Pro	Gln	Gly	Leu	
10					15				20					25		

tgg	aca	ggg	gtg	gct	atg	aga	tcc	tgc	cgc	gaa	gag	cag	tac	tgg	gat	150
Trp	Thr	Gly	Val	Ala	Met	Arg	Ser	Cys	Pro	Glu	Glu	Gln	Tyr	Trp	Asp	
								35					40			

cct	ctg	ctg	ggt	acc	tgc	atg	tcc	tgc	aaa	acc	att	tgc	aac	cat	cag	198
Pro	Leu	Leu	Gly	Thr	Cys	Met	Ser	Cys	Lys	Thr	Ile	Cys	Asn	His	Gln	
								45		50			55			

agc	cag	cgc	acc	tgt	gca	gcc	ttc	tgc	agg	tca	ctc	agc	tgc	cgc	aag	246
Ser	Gln	Arg	Thr	Cys	Ala	Ala	Phe	Cys	Arg	Ser	Ile	Ser	Cys	Arg	Lys	
								60		65			70			

gag	caa	ggc	aag	ttc	tat	gac	cat	ctc	ctg	agg	gac	tgc	atc	agc	tgt	294
Glu	Gln	Gly	Lys	Phe	Tyr	Asp	His	Leu	Leu	Arg	Asp	Cys	Ile	Ser	Cys	
					75			80		85						

gcc	tcc	atc	tgt	gga	cag	cac	cct	aag	caa	tgt	gca	tac	ttc	tgt	gag	342
Ala	Ser	Ile	Cys	Gly	Gln	His	Pro	Lys	Gln	Cys	Ala	Tyr	Phe	Cys	Glu	
								90		95		100			105	

aac	aag	ctc	agg	agc	cca	gtg	aac	ctt	cca	cag	ctc	agg	aga	cag		390
Asn	Lys	Leu	Arg	Ser	Pro	Val	Asn	Leu	Pro	Pro	Glu	Leu	Arg	Arg	Gln	
								110		115			120			

cgg	agt	gga	gaa	gtt	gaa	aac	aat	tca	gac	aac	tcg	gga	agg	tac	caa	438
Arg	Ser	Gly	Glu	Val	Glu	Asn	Asn	Ser	Asp	Asn	Ser	Gly	Arg	Tyr	Gln	
								125		130		135				

A-570B.ST25.txt

gga ctg gag cac aga ggc tca gaa gca agt cca gct ctc ccg ggg ctg Gly Leu Glu His Arg Gly Ser Gly Ala Ser Pro Ala Leu Pro Gly Leu 140 145 150	486
aag ctg agt gca gat cag gtg gcc ctg gtc tac agc acg ctg ggg ctc Lys Leu Ser Ala Asp Gln Val Ala Leu Val Tyr Ser Thr Leu Gly Leu 155 160 165	534
tgc ctg tgt gcc gtc ctc tgc tgc ttc ctg gtg gcg gtg gcc tgc ttc Cys Leu Cys Ala Val Leu Cys Cys Phe Leu Val Ala Val Ala Cys Phe 170 175 180 185	582
ctc aag atg agg egg gat ccc tgc tcc tgc cag ccc cgc tca agg ccc Leu Lys Met Arg Gly Asp Pro Cys Ser Cys Gln Pro Arg Ser Arg Pro 190 195 200	630
cgt caa agt ccg gcc aag tct tcc cag gat cac gcg atg gaa gcc ggc Arg Gln Ser Pro Ala Lys Ser Ser Gln Asp His Ala Met Glu Ala Gly 205 210 215	678
agc cct gtg agc aca tcc ccc gag cca gtg gag acc tgc agc ttc tgc Ser Pro Val Ser Thr Ser Pro Glu Pro Val Glu Thr Cys Ser Phe Cys 220 225 230	726
ttc cct gag tgc agg gcg ccc acg cag gag agc gca gtc acg cct ggg Phe Pro Glu Cys Arg Ala Pro Thr Gln Glu Ser Ala Val Thr Pro Gly 235 240 245	774
acc ccc gac ccc act tgt gct gga agg tgg ggg tgc cac acc agg acc Thr Pro Asp Pro Thr Cys Ala Gly Arg Trp Gly Cys His Thr Arg Thr 250 255 260 265	822
aca gtc ctg cag cct tgc cca cac atc cca gac agc ggc ctt ggc att Thr Val Leu Gln Pro Cys Pro His Ile Pro Asp Ser Gly Leu Gly Ile 270 275 280	870
gtg tgt gtg cct gcc cag gag ggg ggc cca ggt gca taaatggggg Val Cys Val Pro Ala Gln Glu Gly Gly Pro Gly Ala 285 290	916
tcaggaggg aaaggaggag ggagagagat ggagaggagg ggagagagaa agagaggtgg ggagagggga gagagatatg aggagagaga gacagaggag gcagagaggg agagaaacag aggagacaga gagggagaga gagacagagg gagagagaga cagagaggaa gagaggcaga gagggaaaga ggcagagaag gaaagagaca ggcagagaag gagagaggca gagagggaga gagggcagaga gggagagagg cagagagaca gagagggaga gagggacaga gagagataga gcaggaggc gggcactct gagtcccagt tcccagtgc gctgttaggtc gtcacacac aaccacacgt gcaataaaagt cctcgtgcct gctgctcaca gcccccgaga gccccctc ctgg	976 1036 1096 1156 1216 1276 1336 1340

<210> 42
<211> 293
<212> PRT
<213> Homo sapiens

<400> 42

Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp
1 5 10 15

A-570B.ST25.txt

Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg
20 25 30

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met
35 40 45

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala
50 55 60

Phe Cys Arg Ser Leu Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp
65 70 75 80

His Leu Leu Arg Asp Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His
85 90 95

Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu Arg Ser Pro Val
100 105 110

Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser Gly Glu Val Glu Asn
115 120 125

Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu Glu His Arg Gly Ser
130 135 140

Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu Ser Ala Asp Gln Val
145 150 155 160

Ala Leu Val Tyr Ser Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys
165 170 175

Cys Phe Leu Val Ala Val Ala Cys Phe Leu Lys Met Arg Gly Asp Pro
180 185 190

Cys Ser Cys Gln Pro Arg Ser Arg Pro Arg Gln Ser Pro Ala Lys Ser
195 200 205

Ser Gln Asp His Ala Met Glu Ala Gly Ser Pro Val Ser Thr Ser Pro
210 215 220

Glu Pro Val Glu Thr Cys Ser Phe Cys Phe Pro Glu Cys Arg Ala Pro
225 230 235 240

Thr Gln Glu Ser Ala Val Thr Pro Gly Thr Pro Asp Pro Thr Cys Ala
245 250 255

Gly Arg Trp Gly Cys His Thr Arg Thr Thr Val Leu Gln Pro Cys Pro
260 265 270

His Ile Pro Asp Ser Gly Leu Gly Ile Val Cys Val Pro Ala Gln Glu
275 280 285

A-570B.ST25.txt

Gly Gly Pro Gly Ala
290

<210> 43
<211> 291
<212> PRT
<213> Homo sapiens

<400> 43

Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp
1 5 10 15

Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg
20 25 30

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met
35 40 45

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala
50 55 60

Phe Cys Arg Ser Leu Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp
65 70 75 80

His Leu Leu Arg Asp Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His
85 90 95

Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu Arg Ser Pro Val
100 105 110

Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser Gly Glu Val Glu Asn
115 120 125

Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu Glu His Arg Gly Ser
130 135 140

Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu Ser Ala Asp Gln Val
145 150 155 160

Ala Val Tyr Ser Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys Cys
165 170 175

Phe Leu Val Ala Val Ala Cys Phe Leu Lys Met Arg Gly Asp Pro Cys
180 185 190

Ser Cys Gln Pro Arg Ser Arg Pro Arg Gln Ser Pro Ala Lys Ser Ser
195 200 205

Gln Asp His Ala Met Glu Ala Gly Ser Pro Val Ser Thr Ser Pro Glu
210 215 220

Pro Val Glu Thr Cys Ser Phe Cys Phe Pro Glu Cys Arg Ala Pro Thr
225 230 235 240

Gln Glu Ser Ala Val Thr Pro Gly Thr Pro Asp Thr Cys Ala Gly Arg
245 250 255

Trp Gly Cys His Thr Arg Thr Thr Val Leu Gln Pro Cys Pro His Ile
260 265 270

Pro Asp Ser Gly Leu Gly Ile Val Cys Gly Pro Ala Gln Glu Gly Gly
275 280 285

Pro Gly Ala
290

A-570B.ST25.txt

<210> 44
<211> 32
<212> PRT
<213> Homo sapiens

<400> 44

Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp
1 5 10 15

Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg
20 25 30

<210> 45
<211> 37
<212> PRT
<213> Homo sapiens

<400> 45

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met
1 5 10 15

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala
20 25 30

Phe Cys Arg Ser Leu
35

<210> 46
<211> 38
<212> PRT
<213> Homo sapiens

<400> 46

Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp His Leu Leu Arg Asp
1 5 10 15

Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His Pro Lys Gln Cys Ala
20 25 30

Tyr Phe Cys Glu Asn Lys
35

<210> 47
<211> 57
<212> PRT
<213> Homo sapiens

<400> 47

Leu Arg Ser Pro Val Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser
1 5 10 15

Gly Glu Val Glu Asn Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu
20 25 30

Glu His Arg Gly Ser Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu
35 40 45

Ser Ala Asp Gln Val Ala Val Tyr Ser
50 55

<210> 48
<211> 21
<212> PRT

A-570B.ST25.txt

<213> Homo sapiens

<400> 48

Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys Cys Phe Leu Val Ala
1 5 10 15

Val Ala Cys Phe Leu
20

<210> 49

<211> 106

<212> PRT

<213> Homo sapiens

<400> 49

Lys Met Arg Gly Asp Pro Cys Ser Cys Gln Pro Arg Ser Arg Pro Arg
1 5 10 15

Gln Ser Pro Ala Lys Ser Ser Gln Asp His Ala Met Glu Ala Gly Ser
20 25 30

Pro Val Ser Thr Ser Pro Glu Pro Val Glu Thr Cys Ser Phe Cys Phe
35 40 45

Pro Glu Cys Arg Ala Pro Thr Gln Glu Ser Ala Val Thr Pro Gly Thr
50 55 60

Pro Asp Thr Cys Ala Gly Arg Trp Gly Cys His Thr Arg Thr Thr Val
65 70 75 80

Leu Gln Pro Cys Pro His Ile Pro Asp Ser Gly Leu Gly Ile Val Cys
85 90 95

Gly Pro Ala Gln Glu Gly Gly Pro Gly Ala
100 105

<210> 50

<211> 32

<212> DNA

<213> Homo sapiens

<400> 50

tctccaaagct tccgatcctg agtaatgagt gg

32

<210> 51

<211> 34

<212> DNA

<213> Homo sapiens

<400> 51

tctccgcggc cgcgctgtag accagggcca cctg

34

<210> 52

<211> 6

<212> PRT

<213> Homo sapiens

<400> 52

Gly Ala Leu Lys Leu Leu
1 5